UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

Ref: 8ART-AP

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. James Zane, Manager
EG&G Rocky Flats, Inc.
Rocky Flats Plant
P.O. Box 464
Golden, CO 80402-0464

Dear Mr. Zane:

This correspondence is in reference to the Rocky Flats Plant Radionuclide Air Emissions Annual Report for calendar year 1991. This report is dated June 30, 1992, and is required by 40 CFR Part 61, Subpart H. It is the U.S. Environmental Protection Agency's (EPA) finding that additional information is needed from EG&G Rocky Flats for this report.

Point Source Emissions

Section II. of the report (Air Emissions Data) states that effluent sampling is not performed for all radionuclides that are emitted at Rocky Flats. Those with a "low activity and/or non-dispersable form" are not sampled, thus their emissions are not included in the calculation of the effective dose equivalent (EDE) value. Section 61.92 of 40 CFR does not provide for an exemption of any radionuclide from being included in the EDE evaluation. Therefore, all potential radioactive emissions must be included in the EDE value, whether these emissions are measured or estimated. Emissions from those radioactive materials listed in Appendix A of the Radionuclide Air Emissions Annual Report, that were used or exposed to the atmosphere during 1991 must be included in the calculation of the EDE value.

Appendix D of 40 CFR Part 61, "Methods for Estimating Radionuclide Emissions," can be used for emission estimations of radionuclides. Radioactive materials in sealed packages that have not leaked or have remained unopened are excluded from the EDE evaluation.

Please provide EPA with a revised emissions list of the radionuclides released during 1991 (including location). This list must include those radionuclides whose emissions were

estimated as well as those radionuclides whose emissions were sampled. Incorporate all of these emissions in the calculation of the EDE value and submit an updated AIRDOS report.

Diffuse Source Emissions

The discussion in Section IV. of the annual report lists six Operable Units (OU1, OU2, OU3 OU4, OU6, & OU11) as potential sources of fugitive emissions at the Rocky Flats Plant. Each OU contains an assortment of sites with drastically different characteristics and potentials for release. To account for these differences, the diffuse source inventory must be done on an Individual Hazardous Substance Site (IHSS) basis, not an OU basis. Furthermore, the OU list provided does not include some IHSS's that EPA deems to be important "potential fugitive emissions" sources.

An analysis of the site history, current condition, and potential future actions indicates a significant potential for fugitive emissions, particularly during remediation, from the IHSS's listed in Table 1. EG&G Rocky Flats is expected to update this list with additional diffuse sources (IHSS's) during the remainder of 1992 and during calendar year 1993.

As a starting point, the emission rates for the IHSS's listed in Table 1. must be calculated using the same approach that was used to calculate emissions from the 903 Pad. These calculated emission rates must be documented and entered into the EPA model AIRDOS or CAP-88 to derive a diffuse source EDE value. It must then be demonstrated that appropriate monitoring is in place which will allow confirmation and refinement of the calculated emission rates in the future. This will be particularly crucial to your ability to ensure compliance and demonstrate achievement of ARARs during remedial actions which may take place at large, heterogeneous sources like the past landfill.

As a reminder, Section 61.96 of 40 CFR exempts a facility from submitting an application for approval of new construction or modifications, if the EDE caused by the radioactive emissions from the construction or modifications is less than 0.1 millirem per year (mrem/yr) and the facility is in compliance with 40 CFR Part 61, Subpart H. Since EG&G Rocky Flats is not in compliance with Subpart H, EG&G Rocky Flats must submit an application to EPA for approval of any new source term construction or any source term modifications, even if the emissions from the construction or modifications will cause less than a 0.1 mrem/yr EDE value.

EPA is very concerned about the potential for dramatically increased emission rates both from the diffuse sources during remedial action and from the industrial facilities during the mission transition and decommissioning and decontamination (D&D) processes. At present we know very little about the potential effect of these efforts on emissions. For this reason, EPA requires that a complete source inventory of these actions be compiled and maintained and that, to the greatest extent possible, predictive capabilities be established. This will allow us to support decision making and ensure adequate protection of the public.

Please submit the requested information for the point sources and indicate a timeframe for submitting the diffuse source information within twenty (20) working days of receipt of this letter. If there are any questions regarding this matter you may contact Milt Lammering at (303) 293-1440 or Monica Morales at (303) 294-7613.

Sincerely,

(for)

Patricia D. Hull, Director
Air, Radiation, & Toxics Division

cc: [redacted] Vaeth
U.S. Department of Energy
Rocky Flats Office
P.O. Box 928
Golden, CO 80402-0928

Paul Prohardt, Acting Director (CAPCD)

TABLE 1. ROCKY FLATS RADIONUCLIDE INDIVIDUAL HAZARDOUS SUBSTANCE SITES

IHSS	OU	Location/Description
101	4	Solar Evaporation Ponds (and associated equipment)
112	2	903 Pad
114	7	Present Landfill (and spray evaporation units)
115	5	Original Landfill
116.2	12	South Loading Dock, Bldg 444
124.1-124.3	10	Relocation liquid storage tank 68 (East of Bldg 774)
125	8	14,000 Gal. Holding Tank, (Tank #66)
130	1	Contaminated Soil Disposal Area
133.5	5	Incinerator Area
133.6	5	Concrete Wash Pad
138	8	Cooling Tower Blowdown, Bldg 779
150.1	8	Radioactive Spills - 881 Vicinity
150.2	8	Radioactive Spills - 771 & 776 Vicinity
157.2	12	Radioactive Site South, Bldg 444 Area
158	13	Building 551 & 554 Spill Sites
159	8	Radioacitve Site, Bldg 559
160	14	Radioactive Site, Bldg 444 parking lot
161	14	Radioactive Site, Bldg 664 and West of Bldg 664
163.1	8	Radioactive Site #3, Wash area, 700 Area
164.3	14	Radioactive Site 800, Bldg 889 Storage
165	6	Triangle Area (east of Solar Ponds)
170	10	PU&D Storage Yard, NW Quadrant
172	8	Central Avenue Waste Spill
182	10	Bldg 444/453 Drum Storage Area
207	10	Inactive 444 Acid Dumpster
213	10	904 Pad (pondcrete storage tent)
214	10	750 Pad (pondcrete storage tent)

§ 61.15 Modification.

(a) Except as provided under paragraph (d) of this section, any physical or operational change to a stationary source which results in an increase in the rate of emission to the atmosphere of a hazardous pollutant to which a standard applies shall be considered a modification.

(b) Upon modification, an existing source shall become a new source for each hazardous pollutant for which the rate of emission to the atmosphere increases and to which a standard applies.

(c) Emission rate shall be expressed as kg/hr of any hazardous pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine the emission rate:

(1) Emission factors as specified in the background information document (BID) for the applicable standard, or in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where use of emission factors demonstrates that the emission rate will clearly increase or clearly not increase as a result of the physical or operational change.

(2) Material balances, monitoring data, or manual emission tests in cases where use of emission factors, as referenced in paragraph (c)(1) of this section, does not demonstrate to the Administrator's satisfaction that the emission rate will clearly increase or clearly not increase as a result of the physical or operational change, or where an interested person demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator using emission factors. When the emission rate is based on results from manual emission tests or monitoring data, the procedures specified in Appendix C of 40 CFR part 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator. At least three test runs must be conducted before and at least three after the physical or operational change. If the Administrator approves, the results of the emission tests required in § 61.13(a) may be used for the test runs to be conducted before the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum degree feasible for all test runs.

(d) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category.

(2) An increase in production rate of a stationary source, if that increase can be accomplished without a capital expenditure on the stationary source.

(3) An increase in the hours of operation.

(4) Any conversion to coal that meets the requirements specified in section 111(a)(8) of the Act.

(5) The relocation or change in ownership of a stationary source. However, such activities must be reported in accordance with § 61.10(c).